NPS HOSTS THE MARINE CORPS WARFIGHTING LABORATORY'S SIXTH PROJECT ALBERT INTERNATIONAL WORKSHOP

Analysts and warfighters from around the world came to NPS this past March to participate in the Marine Corps Warfighting Laboratory's (MCWL) 6th Project Albert International Workshop (PAIW6). Seventy participants represented five countries: Australia, Canada, Germany, Singapore, and the United States. Local participants included faculty affiliated with the Operations Research (OR) Department, Graduate School of Business and Public Policy, the Modeling, Virtual Environments and Simulation (MOVES) Institute and the Meyer Institute of Systems Engineering, as well as NPS OR students. NPS alumni from both home and abroad were also well represented. This unclassified international effort is investigating how new techniques (such as agent-based models, visualization tools, and data farming), supported by the technical infrastructure (e.g., supercomputers and web-based access) can allow analysts to better address strategic and tactical questions posed by military decision-makers.

Project Albert Director Dr. Gary Horne kicked off the workshop with a look back at Project Albert's beginnings and a look ahead toward using these new approaches to have a tangible benefit on military decision-making. This introductory session was followed by in-briefs from the workgroup team leaders. Some workgroups were refining and extending results from the previous workshop. These teams (and team leaders) dealt with peace support operations (LTC Klaus Titze, German Army), entry from the air and sea (Colonel Grant Sanderson, Australian Army), shallow water obstacles (Captain Ryan Patterson, USMC), communication in sensor networks (Major Szu-Ching Wan, Singapore Army), and military operations in urban terrain (LTC Thomas Cioppa, TRAC-Monterey). Several new problem areas were identified, including the global war on terrorism (Dr. Al Brandstein, Northrop-Grumman), C2 and future conflicts (LtCol John Kuntz, USMC), and force protection (COL William Carlton, U.S. Military Academy, West Point). Some teams explored how these modeling platforms—initially developed for investigating small-scale combat operations—could be adapted for other purposes, such as expeditionary logistics (OR student Captain Eric Wolf, USMC) and enhanced blast

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Project Albert participants from military and civilian organizations in five countries gather in the School of International Graduate Studies courtyard outside Hermann Hall. NPS was well represented at the conference by five faculty, two current students, and twelve alumni.

U.S.-RUSSIAN STRATEGIC CONFIDENCE BUILDING MEASURES WORKSHOP

Associate Professor Mikhail Tsypkin of the Department of National Security Affairs hosted this U.S.-Russian Workshop in Garmisch, Germany on 2-5 June. The workshop is a follow-on effort to the August 2000 Monterey Workshop funded by the Defense Threat Reduction Agency and explored the utility of strategic modeling as a tool for bilateral confidence building. Topics discussed include: 1) Current U.S. and Russia strategic doctrines and transformation initiatives; 2) Factors influencing strategic stability, to include non-military issues; 3) Strategic modeling techniques and concepts; and 4) Options and limitations for conducting bilateral modeling exercises.

FACULTY NEWS

OUTSTANDING ACHIEVEMENTS OF FACULTY RECOGNIZED AT RESEARCH RECOGNITION EVENING

The Naval Postgraduate School recognized outstanding researchers at the Research Recognition Evening held in April. This year's event recognized recipients from 2001 and 2002. The evening was hosted by the Faculty Chair, **Professor Terry McNelley**, with opening remarks from **RADM David Ellison, USN**, Superintendent of NPS. The Evening's commentator was **Distinguished Professor David Netzer**, Associate Provost and Dean of Research. Recognized researchers and their achievements are highlighted.

<u>School of International Graduate Studies</u>

The **Department of National Security Affairs** recognized **Professor David Yost** for his research achievements in 2001. Professor Yost undertook five major research projects: 1) Europe and Information Warfare, 2) European Security and NATO Nuclear Policy, 3) NATO's New Roles in International Security, 4) National Missile Defense and European Security, and 5) Nuclear Arms Control and European Security. Professor Yost's work was published in the journals *International Affairs, Survival,* and *Comparative Strategy*.

Associate Professor Dan Moran was recognized for outstanding research in 2002 in the **Department of National Security Affairs**. His edited volume *The People in Arms: Military Myth and National Mobilization since the French Revolution* was recently published by Cambridge University Press. Professor Moran also contributed the essay on strategic theory and the history of war to the volume *Strategy in Contemporary World* published by Oxford University Press. He also was a leading contributor to the Center for Contemporary Conflict, providing five Strategic Insights for the Center's web site. Professor Moran played a pivotal role in the recent study on the Navy and the Global War on Terrorism that was conducted for N51 and was recently briefed to N3/5.

Assistant Professor Robert McNab's output of peer-reviewed articles shows remarkable consistency and an expanding depth of knowledge in a broad spectrum of subject areas and has resulted in his being recognized for outstanding research achievement in 2001 and 2002 in **the Defense Resource Management Institute**. In 2002, he had articles in press at *Monetary Studies*, *Business and Economic Review*, *World Development*, *Public Budgeting and Finance*, and *Public Finance and Management*. These five papers are in addition to his previous contributions to the literature. His research topics are timely and of special interest to the U.S. Government and the Naval Postgraduate School: the prospects for performance budgeting in the federal government, how fiscal decentralization affects economic growth, and the relationship between international aid and governance and economic growth. His written contributions to the literature on aid, corruption and governance have been incorporated into his

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PROJECT ALBERT INTERNATIONAL WORKSHOP, *continued from page 45*

weapons (Mr. Ken Curio, MCWL).

Following the opening morning sessions, the teams had nearly four days to refine their agent-based scenarios, specify sets of simulation runs to explore the models' behaviors, and analyze the results. Concurrent plenary sessions provided opportunities for workshop participants and others across campus to learn more about Project Albert's goals, suite of agent-based modeling platforms, and data-farming and visualization tools. Dr. Hugh Montgomery, Technical Director of the Warfighting Lab, also provided an overview of the lab's current initiatives and highlighted the ever-increasing need for qualified new scientists, engineers, and analysts as the current civilian workforce ages. Literally billions of simulation runs were submitted to the Maui High-Performance Computer Center for processing, and out-briefs were given at the end of the week. The results from PAIW6 will be published later this year in *Maneuver Warfare Science 2003.* The teams will reconvene at the next Project Albert workshop, to be held at the Marine Corps Warfighting Laboratory in September 2003.

Further information about Project Albert, including past workshops, research documents and contact information, can be viewed at <http://www.mcwl.quantico.usmc.mil/divisions/albert/index.asp>. This edition's featured project, "Smart Experimental Designs Provide Military Decision-Makers With New Insights From Agent-Based Simulations," describes how **Associate Professor Thomas Lucas**, **Professor Susan Sanchez**, and their students have contributed to the Project Albert effort.